# OLD BETHPAGE LANDFILL

## NEW YORK

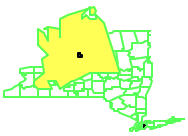
EPA ID# NYD980531727

**EPA REGION 2**

CONGRESSIONAL DIST. 03

Nassau County

Oyster Bay



## Site Description

The 65-acre Old Bethpage Landfill is an inactive municipal landfill that is part of a sanitary landfill complex that was active until 1986. The Town of Oyster Bay began operations at the Old Bethpage Landfill in 1957, primarily for disposing incinerator residue. In 1967, the Town began accepting garbage and trash and allowed home owners to dump trash. From 1968 through 1978, liquid and solid industrial process wastes and damaged drums containing organic residues were disposed of at the landfill. After 1978, metal hydroxide sludges were the only industrial waste disposed of at the landfill. A methane gas collection system was installed to prevent further off-site migration of landfill gas. There are approximately 10,000 people living within 1 mile of the site. The site is located above the Magothy Aquifer, which supplies many public wells.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible party (PRP) actions.

**NPL LISTING HISTORY**
Proposed Date: 10/01/81
Final Date: 09/01/83

## Threats and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs). The main health risks associated with this site are drinking contaminated groundwater. The Village of Farmingdale uses the public drinking water wells directly downstream of the landfill which could be threatened by the contaminants; the wells are tested on a routine basis to ensure compliance with State and federal drinking water standards.

## Cleanup Approach

This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

## Response Action Status

**Entire Site:** In 1982, a methane gas collection system was installed by the Town of Oyster Bay to monitor and prevent migration of gas beyond the boundary of the site. A leachate collection system has been operating at the landfill since 1983. A clay cap was also applied to 29 acres of the 65-acre site. As part of EPA's 1988 Record of Decision (ROD), the following measures were selected to clean up groundwater contamination coming from the landfill and to effect contaminant source control: (1) installing, operating, and maintaining a system of groundwater recovery wells and treating the recovered water by an air stripper and, if necessary, carbon treatment; (2) completing the capping of the landfill to prevent water from entering and thus spreading contaminants; (3) improvements to the leachate-collection system; (4) improvements to the methane gas collection system; and (5) monitoring to determine the effectiveness of the cleanup actions. Construction of the groundwater treatment system was completed in March 1992. The last portion of the capping program was completed in December 1992. The improvements to the leachate-collection system and the methane gas collection system were completed in May 1992 and December 1992, respectively. Based on the preliminary post-construction inspection and the final inspection that were conducted in April 1993 and September 1993, respectively, it was determined that construction for the entire site was completed and that the construction activities performed on-site were consistent with the remedial design and conformed with the remedy selected in the ROD.

**Site Facts:** In May 1984, the Town of Oyster Bay signed an interim Consent Decree agreeing to conduct an investigation of the groundwater contamination at the site and to recommend alternatives for cleanup of both on and off-site contamination. The final Consent Decree covering the design and construction of the remedies selected by the EPA was approved by the court in July 1988.

## Cleanup Progress

The cleanup actions, including the gas and leachate collection systems and the full capping of the landfill, have greatly reduced the potential for exposure to contaminated air, leachate, and groundwater at the Old Bethpage Landfill site. The ongoing operation of the groundwater treatment system will further reduce any potential threat to human health and the environment. The site was considered to be construction complete in September 1993.

A Five-Year Review of the Site was completed in September 2002. The groundwater monitoring data indicates that the groundwater extraction and treatment system is working effectively in removing organic compounds in the groundwater and preventing further migration of the contaminated groundwater. Sampling of two of the five extraction wells indicates that levels of site related contaminants are close to achieving cleanup goals, indicating partial aquifer restoration for the site related contaminants.

The groundwater contamination and the potential for gas migration at the Old Bethpage Landfill are under control and there is no exposure to human receptors from Site-related contaminants. The remedy at the Site is protective of human health and the environment.